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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,207	01/25/2002	Michael G. Lacey	SVC 7644US	1724

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EXAMINER
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LAWRENCE JR, FRANK M

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 11/12/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/057,207

Applicant(s)

LACEY, MICHAEL G.

Examiner

Frank M. Lawrence

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10, 12 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 11 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.

2. Claims 11 and 13 are objected to because of the following informalities: Claim 11 should be amended to depend from claim 10 rather than 9. In line 4 of claim 13, "each sections" should be changed to "each section." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 8 recites the limitations "the cylindrical portion of the core" and "the cylindrical portion of the casing" in lines 2-3. There is insufficient antecedent basis for these limitations in the claim. To overcome this rejection, claim 6 should depend from claim 5 and claim 7 should depend from claim 6.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Figert (3,025,233; figures; col. 2, lines 5-45).

8. Figert ('233) teaches a filter drier for drying refrigerant in a refrigeration system, comprising a casing (20) having an inlet (23) and an outlet (24) for conveying refrigerant, opposed end portions, a cylindrical intermediate portion (22) having an inner surface between the end portions, a molded core (10) disposed in the casing between the inlet and outlet for receiving refrigerant flow, and a spring (27), plate (28) and gasket (29) protruding from the inner surface of the casing for engaging the outer surface of the core to inhibit axial movement. The core is formed from a molded desiccant and a binder and includes a cylindrical portion (13), a frusto-conical portion (12), a closed end (11) proximate the inlet, and an open end (16) proximate the outlet. The cylindrical portion of the core is bonded to the cylindrical portion of the casing using the gasket. In this rejection, the limitation of "bonding means" in claim 3 has been interpreted to mean a restraining or binding device for securing the core and inhibit axial movement. To overcome this rejection, the claim may be amended to recite that the bonding means is a binder that is also used to bind the desiccants together.

9. Claims 1-6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese reference (JP 8-86542 A; see abstract; figures; machine translation paragraphs 0001, 0007, 0010, 0011, 0013, 0018-0026).

10. JP '542 teaches a filter drier for drying refrigerant in a refrigeration system, comprising a casing (4B) having an inlet and an outlet for conveying refrigerant, opposed funnel shaped end portions, a cylindrical intermediate portion having an inner surface between the end portions, and

Art Unit: 1724

a molded core (5A) disposed in the casing between the inlet and outlet for receiving refrigerant flow. The core surface is molded with a wave shape that will define circular indentations around the core surface, and the casing is electromagnetically molded around the core to form circular protrusions that extend into the outer surface of the core, bonding the core within the casing and inhibiting axial movement. In this rejection, the limitation of “bonding means” in claim 3 has been interpreted as in paragraph 8 above, and the limitation of “extends into the outer surface of the core” in claim 4 has been interpreted to mean protruding past a plane formed by the outermost surface of the core, as shown in the instant drawings.

***Allowable Subject Matter***

11. Claims 10, 12 and 14 are allowed.

12. The following is an examiner’s statement of reasons for allowance: A method of manufacturing a filter-drier having a tubular casing and a desiccant core between an inlet and an outlet comprising the steps of forming an indentation in the tubular casing, and molding a desiccant core within the tubular casing around the indentation to conform to the configuration of the indentation, or the steps of dividing an elongate tube into sections, forming indentations in each section, cutting each section to provide a plurality of tubular casings having opposed ends, and molding a desiccant core within each tubular casing to conform to the configuration of the indentation, is not taught, disclosed or suggested in a single reference or a combination of references in the prior art of record. The cited prior art fails to disclose a motivation for the step of molding a desiccant core within the casing that has already been formed.

13. Claims 11 and 13 would be allowable if rewritten to overcome the objections set forth in this Office action.

Art Unit: 1724

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Conclusion*

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose refrigerant dryers having molded desiccant cores disposed in cylindrical casings using various bonding means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 703-305-0585. The examiner can normally be reached on Mon-Thurs 7:30-5:00; alternate Fridays 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Simmons can be reached on 703-308-1972. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Frank Lawrence

*Frank Lawrence*  
11-7-02

Application/Control Number: 10/057,207

Page 6

Art Unit: 1724

Patent Examiner

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November 7, 2002